# INDIAN JOURNAL OF PSYCHOLOGY

Sex in Psycho-Analysis

BY

GIRINDRASEKHAR BOSE.

Calcutta University.

To the popular mind psycho-analysis is sexual analysis and much of the interest of the lay public in psycho-analysis is traceable to this attitude. The problems of sex have a peculiar fascination for the average mind but polite society has put a ban on sexual topics. The natural sexual curiosity therefore takes advantage of any available excuse to find a vent and no excuse is more justifiable than an ostensible scientific spirit of enquiry. When a member of the lay public discusses psycho-analysis he has always this excuse of scientific interest to justify his excursion into forbidden fields. I do not mean to say that in every case this is so: there are certainly persons among the laity who are moved to discuss psycho-analysis from a genuine desire to make themselves familiar with this branch of investigation. Psychoanalysis has another deeper source of attraction. are of such a nature as to stir the deepest layers of the mind. The physical sciences deal with objects which are outside the self and the nature of the interest they arouse in us is bound to be different from the interest in psychoanalysis which deals with the emotions and strivings of our inner nature. Whether a star is of the first magnitude or

not or whether there is such a thing as a universal ether, are problems that do not directly affect us. When an average man is told that his neighbour is secretly planning to rob him of his possessions, his emotions and interest are stirred to a greater depth than the case would be by the announcement of the greatest scientific discovery of the age. Psychoanalytic findings tell us of even more intimate things than our earthly possessions and when a person is informed that his very personality is threatened and moulded by forces about which he has little or no knowledge and if he finds fragmentary evidence of this here and there, he cannot possibly remain indifferent. To maintain his peace of mind therefore he must either discredit the statement and refuse to consider the evidence and take up an irrational attitude of opposition, or go to the other extreme end, exaggerate the significance of all that might go to support the existence of a hidden enemy. Very few people can show an unbiased mind under such circumstances. Any one who is not for psycho-analysis, is usually against it.

When an individual is told bluntly that in his inner mind he harbours an impure love for his own mother he naturally resents. Affection towards the mother is looked upon as the purest form of love by the society as well as the individual and a person who dares impute sexuality to it is considered to be either a crank or a positively perverse individual who is himself in need of mental treatment. psycho-analyst's statement of this type looks so obviously impossible to the average mind that to him it seems futile to investigate the truth of such a proposition. The human mind instinctively recoils from situations which threaten to disrupt the cherished ideals and institutions. Psycho-analytic findings tend to prove that our ethical and social structure have been built upon a foundation which has not the stability ascribed to it and the superstructure whose exterior looks so attractive has been built up with materials which are the

very reverse of beautiful. When the superficial plaster is removed ugly things come to view. Persons who live in elegance and comfort rarely want to see what there is under the plaster of the walls of the house in which they dwell. is only when there is a break in the plaster and the ugly material has shown itself that an individual begins to be really interested in the construction of his house. The mentally diseased person is in such a situation. The psycho-analyst may be compared to an engineer who has interested himself in building construction and who breaks down plasters and mouldings to find out the materials used in the construction of our mental make-up. A psycho-analyst who is true to his science does not work with a bias and does not expect that he will come across a particular material only in the course of his investigations. He is ready to describe whatever comes in his way irrespective of the fact whether such material conforms to our cherished ideals or not. If the same type of brick comes out in every case he investigates, he is bound to say so, although he remembers the possibility of the use of other materials in building construction. He gets his stuff not from speculative considerations but from actual investigation. One must therefore be very cautious in rejecting off-hand what the psycho-analyst has to say, merely on the ground that it looks unlikely and absurd. A psychoanalyst's interpretations must be judged on the basis of actual evidence either for or against them; no preconceived notion should be allowed to influence our decision. The criteria of reliability of psycho-analytical findings have been discussed in another paper. When a psycho-analyst asserts that he has found sex and very often sex of an objectionable type in the analysis of all his cases, his statement is not to be lightly thrown away. It has sometimes been said that a psychoanalyst being himself biased, suggests sex to his subject. This objection is absolutely unwarrantable; no psychoanalyst who at all works honestly ever discusses sex unless the

subject himself has brought it up in his free associations. Of course the possibility of suggestion is not disproved by this; it is quite true that in many subjects the suggestion of sex is inseparably associated with the very name of psychoanalysis; but this suggestibility itself is an evidence in support of rather than a point against the importance of sex. suggestion can be effective unless it touches a sympathetic chord in one's nature. The psycho-analyst is further charged with finding sex in every situation. We may revolt against such an assertion of the psycho-analyst but our revolt does not prove anything. The question has to be judged on the merits of actual evidence. It has been pointed out by supporters of psycho-analysis that the grammarian is obsessed with sex even more than the psycho-analyst. He looks at all objects from the sexual standpoint and classifies nouns according to their gender. Why there should be so much of sex in our life is a question that does not really affect the psycho-analyst. He is concerned with the question whether it is or is not there and how it acts. If however we accept the truth of the statement that sex dominates our unconscious life, our curiosity as to why it should be so is justifiable although it may not be of direct interest to the psycho-analyst. I shall attempt to answer this question after I have discussed the actual evidence.

I shall first consider the evidence as obtainable in diseased persons: A young man comes to me for mental treatment. He does not look ill in any way. He is married and has got children. He belongs to a community which is intensely religious, and he possesses an unimpeachable moral character. He is fairly educated. His complaint is that whenever he looks at any part of a person's body whether male or female the possibility of that part's being used for sexual purpose immediately strikes him and he cannot get rid of the idea, try however he might. This results in an acute mental struggle and makes the patient intensely unhappy. Eyes,

nose, mouth, ear and similar parts in a person gave rise to the strongest obsession. Sometimes even an inanimate object like a motor car brought about a similar obsession. The patient led a miserable life and his movements were restricted to a very great extent. He was extremely shy and did not mix in society.

The presence of sexual factors in a case like the above does not require any proof and anyone who runs may read it. If all cases were like this the psycho-analyst's theories would have been accepted without any opposition. But such cases are comparatively rare. Had they been more frequent still they would not have proved the importance of sexual factors in the causation of mental disorder in general. Such a case should be easily explained as one of sexual perversity and no generalisation would be admissible on the basis of such findings.

Another young man comes and reports that he suffers from attacks of palpitation and giddiness and what he describes as fits of nervousness. On examination it is found that his nervousness really consists in the extreme feeling of anxiety which he experiences on the slightest excuse. If anyone in his family gets diarrhæa he is apprehensive lest it should turn out to be a case of cholera. The slightest rise of temperature in the case of his son brings up the idea that it might be meningitis, a disease about which he had heard from his medical friends. If anybody was late in coming home he would think of accidents. The patient was continuously in a state of what a psycho-analyst would describe as "anxious expectation."

There is no suggestion of sexuality to the laymen in a case of this type. A careful enquiry however brings out the fact that the disease made its appearance only about three months ago and the patient had been living an abstinent life for the last nine months. His wife had given birth to a child about three months back. There is no obvious

connection between these facts and his disease but psychoanalysts have found out that anxious expectation develops as a result of frustration of sexual excitement for any prolonged period. The patient was advised to return to his normal sexual life and got cured rapidly.

A lady of about forty-five begins to lose her normal equanimity of mind. She bursts into fits of temper on very slight pretexts and quarrels with her husband who has all along loved her dearly. She has grown suspicious and thinks that certain persons in the family are hostile towards her. She has become jealous and accuses her husband with infidelity and mentions all sorts of trifling and frivolous incidents as proofs of his loving another woman. This mental change in the case of a woman who has all along been loving and confiding towards her husband, is indeed remarkable. A medical examination shows that the patient has reached her climacterium and the peculiar mental changes coincided with the change in her sexual life.

In the above two cases the symptoms did not reveal a sexual basis but the history apart from any psychological analysis revealed the importance of sexual factors in the causation of the mental symptoms.

The following case does not suggest the presence of any sexual factor either in the symptoms or in the history.

The patient who is a successful professional man complains of an intense depression which has made him lose all interest in his work. He is continually troubled with monetary matters and thoughts of his future which he considered to be absolutely dark. He had lost all attraction for his wife and children and thoughts of suicide haunted him. He was 43 years old. The first attack came when he was 30 years old. It was marked by mental depression and loss of interest in work. This lasted for about a month and the patient was cured. The attacks continued to recur at intervals and up to the time of coming under treatment he had about 12

attacks in all. The maximum normal period between the attacks was about eight months. Two of the brothers and the mother were insane. One brother was wayward and another died by drowning. The patient had also a drowning accident due to carelessness on his part during the course of treatment. He was saved by one of his servants. Treatment was begun on the 11th of May and the first few days were devoted to getting a full life-history of the patient. The patient gave his free associations for the first time on the 15th of May. To make the account less tedious to the general reader, I shall mention only the relevant portion of the material brought up by the patient. The reproduction of the complete material is impossible as it will itself make a good-size book.

"I have no hope in life—all my efforts have failed—this is the retribution of what I have done before—why is this disease—what have I done to merit this—death is preferable to this state—this is a disgrace—I have lost all my reputation—the clock that I hear ticking, is going steadily but I have been impulsive—the clock is fearless but why is this fear in me—I feel as if I have injured somebody—as if I have murdered someone—my only hope lies in the grace of Mother Kali (Hindu goddess—a mother symbol—fierce as well as protective)—my first wife—she is in heaven—I gave her pain in life—she is beyond all pain now—I loved her intensely—not that I do not love my present wife—what is the use of an atom like me in this universe but the policy of creation might be different."

If we follow the rules of free association that I have explained in a previous article we can find a sort of connecting thread running through all the thoughts. Despondency and powerlessness followed by the idea that the disease is a retribution for past sins come up first; then come the ideas of death and disgrace and a fear of punishment (which in later associations became very clear) for having committed some crime—then comes the invocation of a mother image

followed by ideas representing want of love towards wife. The conscious thoughts were of love but both in the cases of the first and the second wife, the want of love comes first and then the love idea. The negative construction of the sentence "not that I do not love my present wife" is significant.

There is nothing of sex in the above associations unless we look upon the associations about the first and second wives as sex associations.

The next day's associations gave the following:

"I was very bad this morning—how shall I be cured—how shall I work—I earned a lot but what will happen now—how shall I make two ends meet—I am afraid of work now—when shall I receive Mother Kali's grace—Mother you are very unkind—my grandfather's friend asked me not to take tea—I disregarded his advice and am feeling uneasy now—I practised Yoga in 1912 but gave it up as it was telling on my health—my brothers have been elated on hearing of my illness—how shall I earn anything if people know about my incapacity, those who respected me before are looking down on me—how shall I be cured by this sort of treatment—oh my God."

There is nothing of sex in these associations again; they begin with thoughts of monetary worry and ideas of despondency. The idea that Mother Kali can cure him by her divine grace again comes up to-day. This is followed by the ideas of suffering as a result of defying persons who are in a superior position. When the patient took to practising Yoga his grandfather's friends asked him not to do so. Then comes the idea of hostility of younger brothers and danger from them as also self-depreciation and finally the invocation of God. The resistance towards treatment is also in evidence.

After carefully scrutinising the associations it was found that the unconscious trend showed the presence of the thought of having disregarded the advice of elders and consequent suffering resulting in humiliation and injury from the younger brothers. Mother Kali could only save him from a situation like this, treatment was useless. The associations of both the days end with the idea that God may be kind after all, *i.e.*, he may have forgiveness.

To the lay readers the above conclusions may not seem to have any important bearing on the case but to the psychoanalyst who is familiar with the different forms of symbolic expressions, the interpretation is very significant. The psychoanalyst from his experience of other cases would know that the patient was fighting against an unconscious idea of guilt and the consequent pang of his conscience which was ever expecting a punishment, or in other words he was under the influence of what is technically called the "punishing conscience."

Although I knew what this unconscious guilt was I did not inform anything about it to the subject at this stage of analysis; it is no use telling a person anything about the unconscious unless he can see the evidence himself and such evidence was as yet wanting. I simply explained to the patient that he was harbouring the idea of some unknown guilt in his mind and of having defied his elders and suffering in consequence, he was also afraid of the hostility of the younger brothers. I therefore asked him to bring up in his mind any incident relevant to the above and which could have given rise to similar thoughts in his childhood days as well as in his later years. The psycho-analysts believe that the unconscious trends are traceable to the childhood days. I did not say anything about sex but simply renewed the direction of speaking without The next day the patient did not come. He came on the third day and brought up the following associations:

"I was looked upon as a "red boy" in the school. ("red boy" is the Bengali slang to denote a passive homosexual subject in a school)—they used to indulge in obscene jokes at my expense—I had to give up the school and take my transfer to another—I was taught

masturbation by a school fellow-he wanted to make me a passive homosexual agent-I refused-I played the active rôle towards a boy at this time—about 3 or 4 years ago I indulged in homosexual practice with a servant boy and took Woman's buttocks particularly attract rôle. the active me-I once felt a very strong liking towards a girl-her buttocks were the cause of the attraction-while very young I practised sodomy with my younger brothers and sisters-I did the same thing occasionally with my first wife and also second—it is a shameful thing to say all this—I had been so much buffetted about in life that I scarcely had time to think about sexual matters—these incidents were few and far between and I indulged in such things only because I could not mix with women—of course all this is very bad what has all this got to do with my disease—such thoughts make the depression worse-my monetary worries are very troublesome now-I am hopeless and despondent-when shall I be cured—oh my God."

The above associations show the presence of sex with a vengeance. One ought to have a clear idea of the exact meaning of such sexual associations. The patient himself did not attach any significance to such thoughts. It could be argued that incidents like those mentioned by the patient happen in the life of many persons who remain normal throughout their life. It will be noticed that in the associations the patient has brought up sexual thoughts of a particular type only. There is at first the thought of struggle with passive homosexuality and this is followed by the actual recalling of sexual incidents which are all of the active homosexual variety. Although most of these incidents belonged to childhood days the psycho-analyst concludes that in the patient's mind an unconscious homosexual trend of the active type was in operation at the time of analysis and this was responsible for bringing up incidents showing active homosexual attitude as a special feature; the past incidents are only of value herein as much as they afford an opportunity for expression of the present unconscious active trend; by themselves they are not of much importance. They however served to prove that the patient could feel such a desire and the revival of appropriate emotion in connection with these incidents would make it possible for the patient to realise that this active sexual trend was still present in his mind.

Now that the reader has got an idea of the nature of the inference drawn by psycho-analysts from the free association thoughts it will not be necessary for me to record in detail all the unsavoury material unearthed by analysis. I shall merely mention the more important of the inferences drawn from such material and in the order in which they made their appearance.

In the next few days' associations the patient brought up idea of fear and disgust in connection with the passive homosexual situations and described how he fought against the advance of his fellow students and others in his school days. He denied ever having played the passive roll in his life. Subsequently the patient did recall such incidents in his past life and the fear in connection with them. Worry about monetary matters became very prominent and then there was a revival in memory of a passive homosexual situation in early childhood associated with pleasurable feelings and the next day the patient felt actual sexual thrill in reviving memories of passive sexuality. Passive homosexual feelings came up in consciousness ten days after the emergence of active homosexuality. An interesting feature in connection with the passive attitude is that the actual incidents were entirely forgotten by the patient and were only revived by analysis; they were looked upon as unpleasant experiences when recalled and it was only subsequently that the pleasure in such a situation was realised by the patient. Psycho-analysts explain this forgetting as due to repression; it is only when the repression is removed that the memory is revived and the original pleasure is appreciated.

The dreams of the patient at this stage on being submitted to analysis showed the presence of love for persons who are in the position of the mother and defiance of individuals who are in the position of the father. The image of either the father or the mother in the unconscious is called an imago by psycho-analysts. The father or the mother imago carries with it all the repressed feelings of the subject towards his parents and such feelings remaining in the unconscious mind can persist even when the actual parent has been dead for a long The father or the mother imago may be represented by other persons in a dream; the person who represents either the father or the mother in the dream is called a father or a mother symbol. Sexual love for the mother and hatred of the father are typical of what is technically called the Œdipus Complex. Œdipus was the hero of a drama by Sophocles. Œdipus as ordained by Fate killed his father and unknowingly married his own mother. When he came to know of this he put an end to his own life after blinding himself.

It will be seen that when the passive homosexuality was striving to come into consciousness the Œdipus was manifesting itself only in dreams and in an indirect form through representations by symbols. The Œdipus trend therefore in this case was deeper in the unconscious than the passive homosexual trend. Although the patient could see the correctness of the Œdipus interpretation he was far from being convinced at this stage of analysis.

As the analysis proceeded it was found that the passive homosexual traits were associated in the patient's mind with feminine traits so that passive homosexuality stood for the feminine side of the patient's nature. A man's nature is essentially bisexual. The conscious attitude towards homosexuality underwent a change about this time and the patient looked upon homosexuality either active or passive as something only socially wrong but not actually sinful. Simultaneously with the freeing of the repression of homosexuality the patient's

sexual love for his wife began to reappear. He had lost all sexual desire with the onset of the disease.

Some time after this the patient dreamt of his maid-servant in an erotic situation. Analysis showed the presence of the passive attitude taken by the subject and the desire for a woman of an inferior social status. The preference for a woman of an inferior social status as the love-object was not restricted to dreams only but was to be observed in the conscious sphere also. The patient asserted that he had never in his life felt any conscious sexual attraction towards respectable This assertion however had to be corrected later on so far as the near relatives were concerned. This peculiarity in the choice of sexual objects is the result of a sort of unconscious defence against the Œdipus love where the love object is a superior woman. In the dream the patient plays the passive rôle and the woman is an inferior woman. these characteristics indicate a fight against the Œdipus love. Later on in the course of analysis it was found that the idea of the maid-servant was associated with the idea of an elderly prostitute which again was related to the idea of the mother.

Simultaneously with the appreciation of this passivity in all sexual relationships a change in the attitude of the patient towards suffering was observed. He could now resign himself to unavoidable extraneous circumstances with some amount of cheerfulness. The capacity of resignation depended as it were on the release of repression of the passive sexual attitude. This resignation attitude however was at first very short-lived. Two days later evidence of resistance to treatment was again marked and the fruitless struggles with imaginary worries reappeared. The free associations showed a failure to appreciate the requirements of his wife which meant a failure of identification with a woman, i.e., a repression again of the passive trait. On the 11th June the identification with a woman was somewhat possible and there was just a sexual thrill in thinking of the requirements of a woman. Next day the patient reported

that "whenever I place myself in the position of my wife I feel strong sexual desire. The free associations at this stage however showed the presence of monetary worries which took the forms of (1) fear of loss of money, (2) fear of being cheated, (3) fear of being dependent on others, particularly his son, and (4) fear of aggravation of disease. The patient however tried to appreciate that these fears were irrational. The monetary fears were ultimately traced to the feminine desire for a child and it is interesting to note that they become prominent when there was some amount of successful identification with the wife. On the 15th June there was again a dream which represented a passive homosexual situation and a death wish This is perhaps the first identification of against the father. the passive homosexual libido directed towards the father and a defence against it. The next few days' associations showed hostility towards the doctor who represented a father imago. The patient used to say to his doctor you are "just like my father." On 24th June the patient dreamt about his uncle. On analysis this dream showed a passive homosexual situation with reference to the father imago. Hitherto there had been no definite evidence of a passive homosexual attitude towards the father and this dream was the first definite indication of the presence of this attitude. In all previous situations the homosexuality, both passive and active, had been directed to either friends or persons of inferior social statusnone of whom represented the father imago. On the 26th June the patient reported a dream in which his elder cousinsister—a mother imago—was looking at him in a "passionate way." On analysis this proved to be a typical Œdipus love dream with the subject in a passive rôle. The free association at this stage showed conscious and open death wish against the grandfather who was a father imago. Active hostility but no active death wish was found against the uncle and the father with whom the patient did not much come in contact in early life. This is the first indication of the appreciation

in patient's consciousness of the Œdipus hate in a direct form, the previous evidence being deduced from interpretations of dreams and free associations. The next few days' associations showed vividly the operations of the punishing conscience—a fear of having to be dependent on the son as a retribution for having injured the grandfather and a constant apprehension of an impending danger, with a feeling of helplessness and inability to thwart it. A remote but actual possibility of monetary loss gave relief to the symptoms in an unexplained way at this period. During the next few days the associations showed hostility towards superior persons, ideas about unchastity of maternal aunt and a fear of being cheated by others. The dreams were all Œdipus dreams in which the maid-servant, the wife as a female ghost, the first wife who was dead, the cousin-sister, the elderly prostitute and his own mother figured by turns as the mother imago. The father in these dreams was generally represented by male ghosts whom the patient defied. The dream of 21st July placed the father imago in the situation of giving birth to a child and the death wish against him was also in evidence. This was apparently a defence against the passive attitude towards the father and the desire to have a child by him. The next day's (22nd July) dream was of importance as its analysis led to the conscious appreciation for the first time of the Œdipus love. patient dreamt about his cousin-sister. The dream analysis yielded the following chain of associations: -wife's sister who is very young and is in the position of a daughter-intercourse with wife imagining her to be the sister-in-law-sexual thoughts towards elder cousin-sister-mother-revival of old forgotten memory that the patient used to masturbate between the ages of 16 to 25 with the help of the imago of his maternal aunt. The analysis led to the conscious appreciation and acceptance of the Œdipus love. The dream interpretation further proved that the fear of female ghosts in dreams represented the fear of incest. Ghosts were prominent in

the dreams of the next few days and analysis revealed the idea of defiance of the father and possession of the mother and a child by her—a typical Œdipus situation. In one of these dreams the patient felt an actual sexual attraction towards the mother. Throughout the month of August the patient continued to have Œdipus dreams. During the next month, September, the patient had a few dreams in which he played passive feminine rôle with a child. In one of these dreams (18th September) the patient played a feminine rôle with reference to the father and a young child actually called him mother. He was practically identifying himself with his mother. The free associations about this period showed that he had made up his quarrel with a friend with whom he had homosexual relationship in his childhood. His capacity to enjoy passivity and rest returned. But the fear of being cheated was still present. The dreams during October showed an alliance with and a friendly attitude towards the father imago. The fear of being cheated was getting adjusted during the latter part of October and the associations on 28th October showed a complete adjustment of this attitude by the mechanism of resignation. The treatment which was completely successful was closed on the 26th of November.

It will be noticed that the active homosexual complex was the most superficial one and was the first to be appreciated by the patient. The passive homosexuality was the next one to rise; it allied itself with the feminine trait. Directly after the alliance of passive homosexuality with the feminine attitude, a heterosexual craving for inferior women came up in the patient's mind in dreams and memory pictures. This is seen to be a sort of defence against the Œdipus feeling. The capacity of identification with a woman developed in the next stage and with this a return of potency. But simultaneously with this the fear of losing money became prominent. Evidence of hostile wish against the father imago next came up in consciousness and dreams and free

associations indicated an unconscious passive sexual attitude Typical Œdipus dreams and the the father. operations of the punishing conscience became prominent in the next phase. Immediately preceding the emergence of the Œdipus in consciousness the patient had a dream in which the father imago played the passive rôle and in the situation of giving birth to a child. Next day there was the conscious appreciation of the Œdipus wish which had hitherto been a matter of inference with the patient. Then came a dream in which the patient played the feminine rôle and had a child by his father. This child actually called him mother in the The patient alternately played the rôles of the son, the mother and father in all possible reciprocal active and passive relationships and this led to the adjustment of the capacity of normal friendship and to the disappearance of the feeling of nervousness in the presence of superiors. inferiority idea and the worry about money matters and the fear of being cheated were the last to go.

Within the brief compass of this paper it is impossible to cite all the evidence in support of the importance of sex factors in this case. I have mentioned only the salient features of the free associations produced by the subject who was under analytical treatment for several months. The material brought up during free association satisfied all the criteria of reliability that I have laid down in a previous paper.

Some psychologists to elude lay criticism have chosen the path of least resistance and have pointed out that the term sex is used in a very wide sense by psychologists. All types of love on analysis show a triple aspect. There is the object of love, there is the feeling of love and thirdly, there is the aim of love. Take the instance of normal gross sexual love. Here the object is a person of the opposite sex, the feeling is the peculiar pleasurable experience felt by the subject and the aim is sexual intercourse. All these three factors are independently variable. The object of sexual attraction

may change from day to day so that the subject may love one person to-day and another to-morrow. The aim also varies considerably from time to time. It is not always sexual intercourse that one craves for with one's beloved. One may simply like to be in the presence of or talk to a person one loves and the pleasurable feeling in such a case is different from the feeling of gross sexual attraction. is possible for a man to feel the purest form of love towards a woman and vice versd. In ordinary friendship between two males for instance the love-object is a person of the same sex, the feeling is the pleasurable feeling of friendship and the aim is friendly intercourse. In cases of homosexuality the friendly feeling and the friendly intercourse change their forms and take on a gross sexual colouring. In actual life there are all types of homosexual love beginning from the grossest sexual perversion and merging by imperceptible stages into the purest form of friendship. also in love between the two sexes. Again in homosexual love situations there may be all sorts of heterosexual attitudes; a man may look upon another male in the attitude of a woman towards a lover or vice versa. There is thus a certain amount of justification for the tripartite analysis of love that I have indicated above. This analysis is due to Freud and gives us a satisfactory basis to consider the problems of the different types of normal love as well as sexual perversions.

If we remember the above discussions it is easy to see how the social stigma associated with gross sexuality loses its force by the widening of the connotation of the term sex and making it identical with love If one is told that one has got an Œdipus love for one's mother and if one is informed in the same breath that the purest form of motherly love and the grossest sexual love are fundamentally identical and traceable to the same source, one is not so unwilling to accept the statement. The building may be made of clay but so long as it is not sticky clay in the crude form, one need not worry about

the construction of the house in which one lives. But unfortunately for our peace of mind it is the existence of a gross form of sexual love that the analysis reveals in an Œdipus and it is no use to give it a sugar-coating to hide its unpleasantness. Œdipus love of the gross type is found in neurotics as well as in normal individuals. In all analysis of normal persons that I have undertaken it has never failed to make its appearance although a conscious appreciation of its existence by the subject is not always possible. The analysis is seldom deep enough in a normal subject since the incentive to a thorough mental search is wanting as there is no painful symptoms to remove. The natural resistance of the subjects hinders deep probing and the first appearance of negative transference puts a stop to the analysis. But not withstanding all these difficulties enough evidence to convince even the most sceptical can always be obtained in all cases, normal or abnormal, which submit themselves for analysis for any length of time. cannot therefore blame the psycho-analyst when he is tempted to make the assertion that Œdipus love is universally present. In most of us it remains in the unconscious level and can only be unearthed by a thorough analysis. Its existence can always be proved by the free association method and by analysis of dreams.

The type of unconscious sexual material that is revealed in psycho-analysis even in a normal person is very much similar to that found in the case mentioned in the paper. The importance of the different sex factors varies in different individuals. Mental traits like anger, hatred, fear, etc., are present in all in varying degrees; it is just so with sexual factors. Just as the anger or the hate chooses different situations in different people for expression so the unconscious sexual trends manifest themselves in different ways in different cases; it is not necessary always that there should be an actual past experience of a corresponding nature for a sexual trait to come in consciousness in a free association test; it can

utilize indirect forms and expressions and imaginary situations as also images for this purpose.

That sex should form so important a constituent of our mental life need not cause any wonder. Biologically speaking the sexual instinct belongs to the race-preservative group. The race is more important than the individual and naturally sexual instinct occupies a greater share in the individual's make-up than instincts like hunger which are of the self-preservative type.

Two of my cases independently raised an interesting point when the homosexual tendencies first began to make their appearance. It was pointed out to me that the interpretation could not be true as the homosexual tendencies stood in opposition to the race-preserving heterosexual craving which was the only fruitful tendency in the sex sphere. served useful purpose in nature. Therefore it could not form a component of the human mind, being against the evolutionary trend. In perverts it was present merely as a result of environmental conditions and it could not possess any important hold on the subject's mentality. This theoretical biological objection does not of course prove the actual absence of homosexuality in human nature but it serves to draw our attention to the fact that homosexuality—since it is universal in its latent form-must have some definite biological significance. In its sublimated form, homosexuality leads to the development of many social traits and has a very great bio-Homosexual tendencies however are present logical value. in animals having no social life. Homosexuality therefore must have some special significance in the development of the individual's psychic life.

To mention one instance—the capacity of an individual to cultivate friendship depends on this factor to a very large extent. Every sexual trend that is unearthed during analysis has in its adjusted or sublimated form a biological survival value which works in a social direction.

# The Reliability of Essay Marks 1

#### BY

#### ASWINI KUMAR DATTA.

The Teachers' Training College, Dacca.

The object of this investigation was to obtain data on the reliability of essay marks.

Thirty essays written in Bengali on the subject "A description of my home" by boys of Class IX of a High School were examined by 24 teachers in April, 1921. The papers were marked out of 20. The variability of the marks was very great. The following are some of the results:

Paper No.			1	Dist	ribı	ıtio	n of	m	arl	8.			Average.	Rank based on average marks.	Range of ranks.
30	Marks	18	15	14	13	12	11	10	9	8	7	6	11.12	1	1 to 30
	Frequency	1	1	4	3	8	1	3	2	3	2	1		•	1 10 30
14	Marks		16	15	12	11	10	9	8	7			10.17		
	Frequency		1	1	7	1	5	2	1	6				7	1 to 14
26	Marks		14	13	12	10	9 8	3 7	6	4	_		8 · 46		
	Frequency		2	1	1	3	3 4	<b>1</b> 3	6	1				15	3 to 26
17	Marks		14	10	8	7	6 8	i 4	3	2			5.62		
	Frequency		1	2	3	1	2 8	5 4	5	1				30	3 to 30

<sup>1</sup> Read at the Indian Science Congress, 1927.

Paper 30 had the highest average, 11·12, and the other papers ranged down to 5·62, assigned to Paper 17. Examiner R considered the entire set of papers worth 11·90 on the average while examiner D considered them worth only 6·13. In fact, there was as much variation among the several examiners in regard to the value of each paper as there was variation among the several papers in the estimation of each examiner.

The papers were divided into two batches of 15 papers each. The intercorrelations (Rank Difference method... $\rho$ ) of some of the examiners based on the marks assigned to each batch of papers were as follows:

Examiner.		Examiner.	1st batch.	2nd batch.
<b>A</b> .	with	В	0.76	0.67
J	,,	w	0.65	0.82
K	** .	N	0.27	0.61
M	,,	${f T}$	0.43	0.69

The correlations of some of the examiners with the pool of the other examiners (excluding his own mark) were:

			1st batch.	2nd batch.
A	with	rest	0.70	0.69
· <b>B</b>	,,	,,	0.34	0.85
J		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.59	0.76
K		<b>"</b>	0.46	0.72
M	13	19	0.50	0.88
N	,,	n	0.62	0.72

In order to pursue further this problem of reliability in essay marks the second batch of 15 papers were re-examined

by 16 fresh examiners in September, 1926. The instructions for marking were the same. The results were much the same as before.

Paper 30 had an average of 12.47 this time, the highest mark being 17 and the lowest 5. Paper 17 had an average of 6.50, the highest mark being 11 and the lowest 2.

The intercorrelations of some of the examiners were:

а	with	ь	0.53
$\boldsymbol{d}$	,,	e	0.66
g	,,	h	0.41
j	••	k	0.28

The correlations with pool were:

$\boldsymbol{a}$	with	rest	0.48
g	**	11	0.68
i	,,	,,	0.84
ı		••	0.64

The correlation between the average marks of the papers in the two examinations was 0.87.

The second batch of papers was re-examined in September, 1926, by 11 examiners who took part in the examination of 1921. The instructions for marking were exactly the same.

The average of the marks assigned by these examiners to the 15 papers was 8.31, the average in 1921 being 8.72.

The correlations between the marks assigned in 1921 and 1926 by the same examiners were:

Examiner.	А.	D.	J.	K.	N.	Q.	w.	T.
Correlation be- tween the marks of 1921 and 1926	0.55	0.63	0.67	0.52	0.82	0.66	0.63	0.42

The intercorrelations between the marks of the different examiners in 1921 and 1926 were—

		Exam	iner.	1921.	1926.
Λ	with	к		 0.54	0.58
K	,,	N		 0.37	0.27
K	,,	Q	•••	 0.41	0·25
Q	,.	. N		 0·49	0.43
W	**	A	•••	 0.28	0.65
w	,,	J	•••	 0.67	0.65

The correlation between the average marks of the papers in 1921 and 1926 were 0.91.

Is there any consistency in the standard of severity or leniency of the examiners? To what extent would the severest examiner of one day tend to be the severest examiner after a week, a month or some years? To ascertain this the examiners were arranged in order of severity or leniency of marking by the average of the marks assigned to each batch of papers. The correlations between these orders were computed. They were:

On	11th A	April,	, 1921		(1st batch and 2nd batch)	0.89
,,	18th	,,	**		11	0.88
,,	11th	,,	,,	and		
	18th	,,	,,		(1st batch)	0.48
,,	,,	,,	17	•	(2nd batch)	0.50
1921	and 1926				(1st batch)	0.26

The above results emphasise the fluctuating and subjective nature of a judgment on an essay and bear witness to the unreliability of the essay type of examination.

#### "The Sterilization of the Unfit"

BY

#### J. NORMAN PACHECO.

Deputy Superintendent, Ranchi European Mental Hospital, Kanke.

(Delivered before the Ranchi Medical Society on the 1st May, 1926.)

> "Thou didst prevent me, I had peopled else This Isle with Calibans."

> > The Tempest.

The subject of sterilization of the so-called dysgenic classes is one that recurs periodically; it is a highly controversial one and has sorely taxed the minds of doctors, politicians and social workers in England, America and on the Continent. As far as India is concerned I believe (and here I am open to correction) the matter has never been discussed and if this measure were to be advocated in India it would, I feel sure, raise a storm of protests from the public and the press and the doctors would not be far behind with their objections. Let us therefore examine this problem in all its aspects with an open unbiased mind.

Doctors and politicians in most countries have from time to time attempted to call public attention to the urgent necessity of taking effective steps to deal with the increase of mentally defective persons. Anyone working upon mental deficiency cannot but be impressed by the constant menace to society and the nation from these defectives not actually under institutional care and we all realize how difficult it is to deal effectively with the problem created by the presence of an enormous number of defective or unfit persons in the community.

The serious view of those who are earnestly endeavouring to do all in their power to improve the condition of the mentally unfit and have the well-being of our race at heart, is the necessity of preventing the advent of any but healthy children. On January 1st, 1922 the number of notified insane persons under care in England and Wales was 123,714—an increase of 3,370 on the previous year. This increase followed one of 3,580 in 1920 and may be compared with the average annual figure of 2,251 for the 10 years ending December 31st, 1914, the decade immediately preceding the War. The mentally defective persons under care on January 1st, 1922 numbered 13,810 of both sexes; compared with the previous year there was an increase of 1,784 patients.

In Scotland on January 1st, 1922 there were 18,027 certified patients including inmates of training schools for imbecile children. The increase over the previous year was 221.

In Ireland on January 1st, 1920 there were 22,578 insane persons in the various mental hospitals and private asylums. The total in Great Britain on the dates mentioned was 178,129.

This does not however include numbers of mentally deficient persons who are taken care of by relatives or friends at home.

It has been estimated by an eminent authority that there are at present in the U.S.A., 42 institutions for the feeble-minded, 350 Mental Hospitals, 23,000 juvenile delinquent institutions, 100,000 criminals and 300,000 insane and feeble-minded persons. This same authority estimates that two-thirds of these defective individuals are parents of defective children. Here is evidence of the enormous importance of heredity and family history. In India according to the census of 1921 there were 88,305 insane persons and 189,644 deaf-mutes and I shall be much surprised if this figure has not increased since.

Now let us examine the causation of Mental Defect. We know that the physical basis of mentation lies in the nervous system and that abnormal mentation in the insane is dependent upon the abnormal functioning of the various parts of the nervous system. This abnormality is dependent on two classes of conditions, one is congenital instability and inefficiency, rendering it incapable of withstanding the ordinary stresses of life or carrying on its functions to the end of life, the other is damage inflicted by the toxic products of disease, or drugs, physical or psychical shocks, the presence of neurological outgrowths or tumours, injury to the brain at birth and derangement in the functioning of the endocrine system.

The first group is said to be endogenous and the latter exogenous.

The most important endogenous cause is heredity which accounts for more than 50 per cent. of the cases. influence is said to be direct when the father or mother of the patient has suffered from mental disease. There is a German hypothesis, which receives support from Orchansky's statistics, that the constituent element of the ectoderm is derived from the father and since the nervous system is of ectodermic origin it is supposed that paternal heredity is much stronger than Statistics show that this is especially the case with maternal. regard to sons. Heredity is collateral when mental disease occurs only among the brothers, sisters, uncles, aunts or cousins. It is said to be atavistic when only the grand-parents or more remote ancestors, but not the parents of the patient, have been mentally afflicted. Heredity has been defined by Prof. Thompson as "The genetic relation between successive Lock defines it as "The transference of similar generations." characters from one generation of organisms to another; a process affected by means of the germ cells or gametes." Naegli calls the hereditary substance represented by the sexual pro-nuclei or chromosomes which fuse together in the act of fertilization by the name of "Idioplasm." The resulting

germ contains the images of two individuals and therefore capable of transmitting by heredity their characteristics to the individual developed from it.

In Mendel's experiments with peas, beans and bees, he called the character that prevailed "dominant" and the character that was suppressed "recessive." He found that a cross between a plant with a dominant character and one with a recessive character yielded offspring all resembling the dominant parent as regards the character in question. In the next generation the cross-bred plants were allowed to fertilize themselves with the result that their offspring exhibited the two original forms in the proportion, on the average, of 3 dominants to one recessive, when the recessive were allowed to fertilize themselves they gave rise to recessives only for any number of generations.

Some consider that the heredity of mental deficiency is in accordance with the Mendelian laws, if mental normality be regarded as the dominant and mental deficiency the recessive character. Others do not agree to this but hold that mental defect is the result of the inheritance of a germ plasm that has undergone devitalization. It may be taken as a general rule that it is unusual for two mentally defective individuals to become the parents of a normal child, but there is much truth in the saying that "one Idiot may taint the whole race."

Let me quote you the classic example that is always being quoted and will be quoted again: the Kallikak family. During the American revolutionary war a certain young soldier Martin Kallikak of good stock had an illegitimate son by a mentally defective girl. In 1912 there were known to be 480 direct descendants of this union, 36 were illegitimate, 33 were sexually immoral, 24 were confirmed alcoholics and S kept houses of ill-fame. The explanation of so much immorality is that of the 480 descendants, 143 were known to be feebleminded and many of the others were of questionable mentality.

Years later he married a woman of good family who bore several children and the descendants turned out well, many of them being distinguished. The two families lived in the same environment. Equally notorious is the Jukes Jukes, himself a mentally defective, had two sons who married two degenerate sisters from whom six generations numbering 1,200 persons were born, of every grade of idleness, viciousness, pauperism, disease, idiocy, insanity and crime and of the total more than half the women fell into prostitution. By the year 1915 the clan had reached the 9th generation and then numbered 2,820, half of whom were alive. Although the family was scattered widely over the country. change of environment produced no benefit. They still showed the same indolence, feeble-mindedness and licentiousness and the cost to the state had risen to two and a half million dollars! The one who investigated the family history justly remarked that this evil might have been averted by preventing the reproduction of the first degenerate. The Nam family is another example. Briefly of 784 descendants, 658 were either alcoholics, immoral, or became criminals, and it was estimated that this family cost the United States one and a quarter million dollars. The experience and studies of numerous other investigators is that two-thirds of all feeblemindedness is due to heredity. Dr. Barr, Chief Physician of the Pennsylvania Training school for feeble-minded children at Elwyn states, "The family histories collated in the institutions and hospitals of our land form in themselves a library of tragedies which would convince the most sceptical of the magnitude of race-suicide, increasing with each generation. In my individual study of 4,050 cases of imbecility, I find 2,651 or 65.45% caused by malign heredities and of these 1,030 or 25.43% are due to a direct inheritance of idiocy and 280 or 6.91% to insanity." Dr. Paul Bowers, Superintendent of the Mental Hospital at Logans port, Indiana, who has gathered data from a personal examination of more than 5,000 prisoners, found that the antecedents of 44% of the examined convicts were psychopathic individuals who were insane, feeble-minded, epileptic, criminal, or suffered from organic or functional disease of the nervous system. On the other hand careful inquiry into the family histories of the progenitors and collateral members of ancestral stock will generally show that a child born sound in mind and body is begotten by parents sound in mind and body themselves, whose stocks are free from any neuropathic or physical taint.

You see therefore from the figures I have quoted that there has been a steady increase in the mentally defective population in England and Ireland and I have no doubt that since the last census of 1921 which shows that we have an insane population of 88,000 in India there must be a corresponding increase. We have no definite figures to show what our mentally defective population in India is and the number of uncertified uncared-for idiots, imbeciles and feeble-minded persons at large must be equally large if not larger. With such appalling numbers it is imperative that everything in our power should be done to ameliorate this state of affair and stop this increase in our unfit population; and the sooner radical measures are taken seriously to effect an improvement the better it will be for our country. If India is aware that this increasing population is a menace to the community then it must be the apathy of the nation, and us doctors in particular, that nothing has been done or that there is any hesitation to adopt drastic measures that are indicated to combat the peril that is looming up before us. There must be no doubt that the cause of this increase is largely due to heredity. Owing to the continued distress and anxiety due to the wear and tear of modern life many cases must be the offspring of parents showing signs of breakdown before marriage and even in these cases whose parents appear well and strong, a neuropathic strain can be traceable in the family history in most.

### Sterilization of Mental Defectives.

The time has surely arrived when instead of fostering the growth of mental defectives we should seriously consider the important problem of endeavouring to prevent their propaga-When we have such a widespread movement as Birth Control among the normal population as advocated by Dr. Marie Stopes to combat the present-day economic depression and distress by having as small a family as possible, how much more is it not essential that we should have birth control for our abnormal population, to prevent the propagation of their "species." This can only be done by the sterilization of those who are definitely unfit. By sterilization I do not mean asexualisation which has been practised in many countries for thousands of years. The history of sterilization can be traced to the very earliest times. suggested that the state should marry the best with the best and the worst with the worst and that the former should be encouraged to breed freely, while the offspring of the unfit should be destroyed. Aristotle was in favour of allowing children in excess of those required to die from exposure, all deformed children not being permitted to live. primitive races deformed children and even twins are looked something evil and are promptly destroyed. Sterilization was known and practised by the Hebrews and the Egyptians, the American Indians, the South Sea Islanders and even in Scotland on the insane, idiotic and epileptic and on those suffering from a transmissible disease. In 1907 a law was enacted in the state of Indiana for the sterilization of confirmed criminals, idiots, imbeciles and rapists. other states have passed bills authorizing sterilization and among them New York, Washington, New Jersey, California, Iowa, Connecticut, Utah, Nebraska and Oregon as well as In addition to mentally defectives certain confirmed

criminals are sterilized in some of the above states. Germany as an inducement to submit to sterilization the term of imprisonment for some confirmed criminals is reduced. When a person has been definitely pronounced by alienists to be of feeble mind he or she ought to be prevented from ever having the chance of being a parent. Although this would be for the advantage of the state it is certainly for the benefit of the individual who with no idea of responsibility should be prevented from bringing into the world children to be looked after later on by others. It is extraordinary how prolific these mental defectives are, especially high grade and moral imbeciles. Dr. Barr of Pennsylvania states that their sexual impulses are ever exaggerated and that they reproduce their kind from 2 to 6 times more rapidly than normal people. Bontor mentions a report of 15 mentally defective women who produced 116 children. There is no need to guess what will become of such children. In spite of the care bestowed on them in training schools and other institutions in which they are well looked after they will bear the strain of feeblemindedness and be more or less useless to the world.

## The Method of Sterilization.

Sterilization may be done in the male by vasectomy. A local anæsthetic is only needed. A small incision is made in the scrotum in the situation of the epididymis and the vas deferens isolated, a loop drawn out and divided and about a quarter of an inch cut from it. The distal end is tied and the end nearer the testicle left open so that the secretion from it may be absorbed into the blood and thus prevent any disorder of metabolism. The contents of the scrotal sac are returned and the wound closed. In the female the operation is more severe. The uterus is exposed and the fallopian tubes are clamped and divided and the ends nearest to the uterus tied. The ovarian end of the tube is left open thus

permitting the absorption of the ovarian secretion. Sterilization may also be brought about by X-rays in both sexes but it must be remembered that whereas vasectomy and salpingeetomy do not interfere in any way with the functions of the interstitial cells of these important glands X-ray may possibly do so.

Sterilization by these methods does not in any way alter the life of the individual in the slightest degree and it makes ng difference whatever to the sexual desire. Now what is the first thing necessary to adopt this preventive measure? We must have permission to do so. Legislation is necessary. We must have an Act in the Statute Book. Unfortunately we cannot get away from the interference of the politicians and lawyers who will attempt to obstruct us on the grounds that we are interfering with the liberty of the subject and there will be opposition and criticism on all sides on purely sentimental grounds. This will have to be overcome by educating public opinion by means of propaganda from the platform and the press. In short we shall need have a Mental Deficiency Act like that passed in England in 1913 with the additional clause that sterilization be legalised. Before the passing of this Act it was said that the nation which first had such an Act would benefit enormously and nations which ignored the problem would inevitably go under. A certain British legal luminary recently said, "The Mental Deficiency Act is one of the greatest boons which the British Parliament has ever conferred upon His Majesty's subjects and more particularly upon the poorer members of the nation." If India therefore wants "a place in the sun" like the other big Powers let us adopt every means to preserve an A-1 population, if not, with the present state of affairs we shall eventually deteriorate into a C-3 or even a Z-6 nation.

I maintain that sterilization is a perfectly humane method of treatment for while still endeavouring to do all in our power medically for the unfortunate subject we wish for the sake of the state to prevent propagation of the unfit which from a state point of view is of the greatest importance. At present Parliament annually votes for £150,000 to be expended on the treatment and care of mental defectives in It is the only way of doing real permanent good. Sterilization does not change the life of the individual in the slightest degree and by this means we can, if not get rid of this class, at least, as years roll on, diminish to a great extent their numbers. I do not want you to believe for a single instant that sterilization is going to wipe out mental deficiency, that is as impossible as it is to drain the sea of its The mentally defectives will be with us for all time, but we can surely reduce the ever-increasing population by a method that is simple and humane with no cost to the state which will eventually reap an enormous benefit by it. nowever, this does not meet with general approval as being impracticable or too drastic or you oppose it on legal or sentimental grounds let me say in conclusion that if there be any more effective methods of treatment by all means let us adopt them; but considering the perfectly appalling numbers of mental defectives in our midst and the fact that whatever treatment has hitherto been carried out has been insufficient to diminish these numbers, then I think it is high time to try something which may prove to be more radical and that therefore sterilization should be given a fair trial.

# At the conclusion of the paper the following discussions took place:

In opening the discussion, Major Berkeley Hill said that he thought that the Ranchi Medical Society should be very grateful to his colleague, Dr. Pacheco, for having read such an excellent paper on such an important subject. Referring first to the legal aspect of the subject, Major Berkeley Hill reminded the Society that the whole question of the sterilization of the mentally defective had been discussed exhaustively by Professor Robert Gaupp of Tübingen, at the German

Psychiatrical Congress which met last year at Cassel. German psychiatrists were acutely concerned to get the existing legislation altered. A debate on this subject had taken place in the Reichstag in July, 1914, but owing to the outbreak of war the matter had to be dropped. The existing law in Germany dates from 1871. In the United States of America and in Switzerland, the state of affairs is otherwise. As long ago as 1911 Forel had urged the compulsory sterilization of mental defectives in Switzerland. In America, sterilization has been a legal measure since 1907 and 3,233 persons have been sterilized; 1,853 males and 1,380 females. As far as the speaker was aware there is no legislation in India on this subject beyond the legal maxim: "Vollenti non fit injuria." This however, does not help in the matter of sterilization of mental defectives. Alluding to the part played by heredity in the transmission of mental defect, Major Berkeley Hill pointed out that there exist two principal views in this respect. First, that mental defect is a "mutation defect," i.e., the Mendelian theory. Second, that mental defect is due to a devitalisation of the germ-plasm. If the first view be correct then sterilisation of mental defectives is almost useless because it would take 22 generations to reduce 1% of mental defectives in any community to 0.1%. If the second theory be correct, sterilisation is obviously an impossible procedure as it would necessitate the sterilisation of every person, male or female, who shewed any psychopathic tendency. Berkeley Hill went on to point out that there is a good deal of evidence to shew that mental defect in a family tends to die out. He quoted the opinion of Sir Frederick Mott and alluded to the work of the two Minkowski's who had studied a family for six generations. In the first generation, there was one mental defective; in the second generation of 8 persons, there were 2 mental defectives; in the 3rd generation of 35 persons, 7 mental defectives; in the 4th generation of 98 persons, 8 mental defectives; in the 5th generation of 155

persons, 3 mental defectives, and in the 6th generation of 94 persons, none at all. Major Berkeley Hill concluded his remarks by expressing a hope that the necessary legislation in this country would not meet with as much opposition from the legal profession as Dr. Pacheco feared. Anyhow, when the lawyers began to feel their pockets touched through a rise in taxation for the cost of maintaining more institutions for mental defectives, their indifference to this important matter would at once evaporate.

Colonel Masson congratulated Dr. Pacheco on his paper and remarked that the information now placed before the meeting would have been invaluable to him when as Inspector-General of Civil Hospitals he had to report to Government last year on this subject. He was now glad to find that the opinion then expressed had been corroborated by an expert in every respect. He had replied to Government mostly on what had come under his personal observation in India and quoted the case of a vagrant imbecile woman who had three times given birth to imbecile children in his hospital. Sterilization should in his opinion be at first reserved for such cases. The main difficulty was the legal one. He would like to ask Colonel Vaughan regarding the rôle of radium as a means of sterilization more especially in females where surgical procedures were more risky than in males. He would also like an expression of opinion from Dr. Pacheco as to the attitude of the Roman Catholic Church in this matter, and the views of Indian members of the Society on the same point would also be helpful, both Hindus and Mahomedans.

Dr. B. K. Ray congratulated Dr. Pacheco on his very able and interesting paper but feared that however desirable the procedure might be from the point of view of society as a whole, the orthodox Hindu community would surely oppose legal action in the matter, as they considered the birth of a son essential to the individual for the purposes of *Pinda* and for the future happiness of the spirit after death. Educating

the public by the demonstrations of the evils of unchecked propagation by undesirables should be the first step and this in future, may by creating healthy public opinion pave the way to some sort of legislation on the subject.

Col. Vaughan (President) also congratulated Dr. Pacheco on his paper and remarked that radium as a means of sterilization would be a dangerous thing both to the individuals to be sterilized and also to the community on account of the misuse to which it might be put. He too thought that the main difficulty would be the legal one.

Col. B. J. Singh remarked that the measure proposed appeared to him to be too drastic and impracticable. from religious, moral and sentimental objections it had no scientific sanction behind it. We have no exact knowledge of the conditions which are responsible for the production of mental disease. The causes which are generally blamed in text books on mental diseases as well as in the mental hospital reports, for the development of mental disorders such as business anxiety, death of a dear relative, loss of property, disappointment in love, religious fervour, political excitement, injuries and toxaemias, etc., utterly fail to explain the problem, as is well known that every individual at one time or other during his life-time is exposed, in many cases repeatedly, to many of these conditions and yet despite this fact sanity is the rule and insanity the exception. Again, too much stress has been laid on the inherited predisposition, but it must be remembered that our ideas of heredity are largely founded upon hypotheses. We have no biological data to determine the exact part played by heredity in any given case. being the case it does not seem justifiable to advocate a line of treatment which is so drastic and objectionable on various grounds.

A careful study of the symptoms of mental diseases will show that the phenomena observed are identical with those which are met with in disorders of the internal secretions.

As examples we may quote idiocy, cretinism, neurasthenia, psychasthenia, dementia, etc. All these are intimately related to the inadequacy of the thyroid, the adrenals, and the pituitary body. It would thus seem that the most rational method to deal with this question, i.e., the prevention of the spread of mental diseases, would be to pay greater attention to the study of the biology of the internal secretions and advocate such hygienic and other measures as would ensure the normal growth and development of the endocrine tissues and preserve them in an efficient state of functional activity.

Dr. N. C. Mitra thanked Dr. Pacheco for his excellent and illuminating paper on a subject which is interesting to all. The question which requires decision is whether the method of sterilization will not add to any further neurotic trouble and whether it is likely to be effective as regards the main It will require a long time to prove the thesis and until and unless this is done it is doubtful whether it will meet with universal approval. So far as England is concerned the method advocated has not been followed to any great In India it will take a long time, perhaps some generations, to decide whether it will ever be adopted or it may, as pointed out by Dr. Roy, be objected to on religious grounds, but any way the lecturer has hit upon a theory which when reduced to practice in England and in India and if found successful, will lead to the removal of a great evil for which humanity will ever remain grateful. The lecturer has impressed the necessity of having a legal basis to go upon. In India, to think of forcing upon the population an Act legalising sterilization for the unfit, is preposterous as unless and until the theory can be established nothing further can be The only way to solve the problem is co-operation among the people and medical men to find out the best means to combat with the evil. If England takes the lead something in the way is possible.

Dr. Pacheco in replying to the discussions said that the subject was one that bristled with controversy and he was not surprised at the diversity of opinions expressed and the objections already raised by the doctors. It would certainly take a long time before the Profession and the public in India adopted this measure, but they would have to be educated as to the value and necessity of it by means of intensive propaganda from the platform and the press. Since we cannot stamp out the mentally defective population which will always be in our midst, we can at least reduce the ever-increasing numbers, and we must. The alternatives of segregation in mental hospitals, institutions and homes for the feeble-minded, or the introduction of State marriage certificates, are quite impracticable in India. For the former we shall need institutions in almost every large town in the country and it is most unlikely that the state will undertake such a large project. Sterilization therefore is the safest and easiest means that we It is the cheapest and the ultimate benefit to the State and society will be enormous. He agreed with Col. Vaughan that the use of radium or X-rays is not to be preferred to surgical means because one can never be certain that 'sterilization is as sure and complete as one can be with an operation. In addition radium or X-rays would destroy the interstitial cells of the ovaries or testes which is undesirable, and it is quite possible that instead of ameliorating one might aggravate the mental condition by upsetting the balance of endocrine metabolism. The objections raised on religious grounds would be another obstacle, and he felt with Dr. Roy that the greatest barrier in this respect would be the Hindu community, but he assured Col. Masson that he need fear no such objection from the Roman Catholics. The Catholic Church, though it strongly denounced and discouraged Birth Control the world over as pernicious and sinful, would not object to sterilization when it is advocated as a means of treatment of a disease for the sake of the individual and the state.

Granting that legal sanctions were accorded to this measure, the practical difficulty would be where to begin. Obviously it is the high grade mental defective and meral imbecile that is at large and not under proper control that should be dealt with. He suggested that a start should he made in the mental hospitals and that all patients about to be discharged should submit to sterilization before going out into the world, and that sterilization should be enforced as a condition for discharge, for though a patient is pronounced cured and to all intents and purposes is again a normal sane individual, it is more than probable that he or she is the potential parent of a mental defective. Similarly this measure should be tried in jails and reformatories especially with confirmed criminals, habitual "jail-birds" and delinquents. A suitable reduction in the term of sentence should be made as an inducement to submit to sterilization.

The possibility that sterilization would lead to an increase in immorality, the lecturer believed to be quite negligible and that the fear of this was more exaggerated than real.

#### Notes and Abstracts.

## Industrial Psychology Monthly, January, 1927.

To gauge Workroom Temperatures.

Combinations of temperature, humidity and air movement which produce the same feeling of warmth are called equivalent conditions. The numerical value of all the equivalent conditions, as determined at the research laboratory at Pittsburgh, is 66 degrees. This arbitrary index is called the effective temperature index. Effective temperature is an index of the degree of warmth felt by the human body as a result of temperature humidity and movement of the air. It is possible to establish certain limits of effective temperature within which the majority of individuals will be comfortable. The comfort zone is found to lie between 63 and 71 degrees. If the dry bulb temperature, the wet bulb temperature and the velocity of air, be given the effective temperature can easily be determined.

Reducing Delivery Man's Mistakes: by T. R. Johnson.

The author administered a set of Intelligence tests to a number of 'delivery men.' There were four individual ratings by superintendents in charge of the delivery men. The two sets of scores show a satisfactory correspondence. The author urges that "the score of an individual in the general intelligence test is directly predictive of that individual's success as a delivery man."

A Business Ability Test: by H. W. Hepner.

The paper describes a set of tests applied to a set of students at a Business school as also to a number of business

men. The data indicate a certain relation between the ability in the tests and that in business. The author does not claim any predictive value for the tests.

University of Calcutta.

N. N. SEN GUPTA.

# The Journal of Abnormal and Social Psychology, Yol. XXI, No. 4, January-March, 1927.

The Margery Case.

Psychologists in America have been, for sometime, much exercised over the question of genuineness of Mrs. Crandon's mediumship. Dr. Crandon and the Psychical Researchers grouped themselves on one side and claimed that the phenomena observed at seances with Mrs. Crandon as medium were capable only of 'spiritistic' explanation. On the other hand, a group of scientists who studied the 'manifestations' issued a report declaring the whole thing to be a product of fraud and trickery. A long and acrimonious discussion has been going on for some time between the adherents of the two groups. The Journal of Abnormal and Social Psychology offered a prize of five thousand dollars to any one who would be able to demonstrate the occurrence of 'spiritistic' phenomena under controlled conditions before a committee of well-known scientists. No respectable medium came forward although a number of offers was received from psychopaths and even from lunatic asylums. Another challenge to mediumship came from Dr. G. H. Code of the University of Delaware who is not only a very learned professor but also apparently an able magician. For, this gentleman successfully duplicated the so-called spiritistic phenomena under the conditions in which Mrs. Crandon works. The present issue contains an editorial note upon the case as well as an interesting study of it by J. B. Rhine and L. E. Rhine.

National Differences in Conversation: by C. Landis.

Different groups of people differ with respect to the topics about which they usually converse. If casual conversation that one overhears in public places, by means of judicious eaves-dropping, be gathered together and tabulated the data would prove highly interesting. H. T. Moore, M. Landis and H. E. Burtt have previously published such data. The paper before us presents a classified list of the topis that have served in conversation in three cities, New York, Columbus, Ohio and London. The table is given below:

TABLE GIVING PERCENTAGE FREQUENCY FOR TOPICS OF CONVERSATION.

(FIGURES FOR NEW YORK ARE FROM MOORE AND THOSE FOR COLUMBUS FROM M. H. LANDIS AND H. E. BURTT.)

Classification.		Place.	Man to Man.	Woman to Woman.	Man to Woman.	Woman to Man,
Money and Business		London New York Columbus	35 48 49	5 3 12	0 22 19	8 12 10
Amusements or Sports	•••	London New York Columbus	16 14 15	0 4 11	8 25 25	10 24
Men	;	London New York Columbus	15 13 - 12	14 44 22	12 13 11	4 22 14
Women	•••	London New York Columbus	5 8 4	26 16 15	20 10 15	24 13 10
Clothing or Decoration	•••	London New York Columbus	5 2 5	16 23 19	16 3 7	17 17
Self		London New York Columbus	7 9	20  15	16  23	12  18
Other Classifications		London New York Columbus	16 15 6	18 10 	28 27 10	44 26 7
		London New York Columbus	74 80 195	7 3 15	25 <b>32</b> 63	25 32 87

The Psychology of Alfred Alder: by W. F. Vaughan.

The paper presents a critical estimate of Adler's psychological theory. He defines the 'Individual-Psychological Method' as a search for 'the life-purpose of the individual, since it is in the service of this ideal that symptoms assume their meaning.' Each person, however, develops a fiction of superiority peculiar to himself. Hence, an intimate knowledge of the whole life of the individual is essential to the legitimate interpretation of any event in his career.

The neurotic person seeks to assert his or her independence. Most of the peculiarities can be traced to unsatisfied wants predominantly sexual in nature. The inner deficiency develops an unusual degree of sensitiveness in the matter of dignity. At the same time, the neurotic is child-like in his timidity. He is wanting in confidence and dilatory in all matters even anticipating disagreeable consequences. He is obsessed with a craving for power.

The obsession may manifest itself in the form of greediness in the attitude of perpetual criticism, or in the process of 'decompensation.' The usual method of decompensation is to exaggerate one's sufferings so that the family is all attentive to the individual. The feeling of inferiority which underlies neurosis, for it opposes the desire for superiority, is occasioned, according to Adler, by a morphological or a functional disorder. Thus, heredity and environment both contribute to the development of the feeling. A process of compensation usually sets in, so that the deficiency of the inferior organ is amply made up by means of accomplishment in some other direction. In order that the desire for superiority may find a sure fulfilment, the neurotic creates a world of fiction in which he lives in security.

## The Present Status of Social Psychology: by F. H. Allport.

The author proposes to give a "brief outline of the current movements to which the name, 'Social Psychology' might

- be given:" (1) The 'Social forces' School: To this group belong Tarde Ross and others who seek to explain all social phenomena in terms of certain instincts such as fear, hate, gregariousness, etc., (2) Social Mind Theories: To this school belong a large number of writers: Spencer, Espinas, MacDougall, Rivers, LeBon and others. Some of the authors postulate a social mind as distinct from the individual mind; others maintain that 'a larger view of mental organisation is necessary in order to understand social occurrences.'
- (3) The Social Laws approach: The Social group is subject to laws peculiar to itself. Social psychology can be approached only through these laws. B. W. Brown's Social Groups and Znaniecki's Laws of Social Psychology represent this point of view; Kroeber's theory of the super-organic is based upon the same assumption.
- (4) The Cultural approach: The ways in which social groups express themselves crystallize into institutions such as those of language, time measurement, manners, etc. We may treat these in detachment and discern in them the operation of laws. Social Psychology, so far as we can regard it as a separate discipline, is an approach of institutions from the angle of mind.
- (5) Individual as the cause of Society: "In human instincts and emotions untouched by society are to be found the sources of social organisation and change." This idea is represented by MacDougall, Tead, Veblen and others. It differs from the 'social forces' theory in as much as the psychic processes are not treated in abstraction from their human setting.
- (6) Society as the cause of the Individual: Champions of this view reject instincts as causative factors in social life. They maintain that native reactions are never found in adult individuals, whose conduct is determined by social object, stimulations received from social behaviour and the traditions of culture in which he lives. The standpoint is illustrated in

the writings of Bernard (Instinct), Dewy (Human Nature and Conduct), Baldwin (Mental Development) and others.

(7) Behaviourism: From this point of view, the study of the individual is the proper approach to Social Psychology. The individual possesses a disposition to instructive and emotive responses. These are brought into play through stimulation of social and other objects. The Behaviouristic view explains social behaviour in terms of habits common to the entire race or group. Giddings, Allport, Bogardus and Dunlop belong to this school.

Other articles of interest in this volume are: Thurstone— The method of paired comparison for social values. Van Loon—Amok and Lattah.

Calcutta University.

N. N. SEN GUPTA.

#### The Child Annual, 1926, No. IV.

Delinquent Attitude: by Marian Van Waters.

This paper points out the importance of attitude in delin-Attitude is defined "as the deep intrinsic response the personality takes as a matter of course in a given situ-The nature of response to a situation is determined by the emotional attitude assumed by delinquents. attitude is very early conditioned by the emotional attitude of the parents, the school, the church, and the social agencies such Juvenile Courts. According to the author "bad as the methods produce the attitude of delinquency." She warns the parents and authorities against any hostile approach which may serve to set up defence-reaction in children. remedial measure, she suggests that a sense of human relationship should be fostered and the feeling of isolation should never be allowed to be permanently fixed in offender.

Nervous Children and their Training: by C. Macfie Campbell.

This paper describes a number of nervous symptoms which indicate a sensitive constitution or maladaptation to the environment and faulty upbringing in early life. The treatment of nervous children should, according to the author, consist in allowing more straightforward and frank dealings on the part of parents and teachers and independence in thought and action. The proper method of helping the nervous child lies in supplying the missing educational links and in the manipulation of the environment of home and school. The co-operation of the teacher and parents is indispensable.

# The Platoon Plan: by William F. Kennedy.

It is a brief description of the plan of the Platoon school, its basic features and advantages. The paper states that it is founded on the principles of modern psychology of good pedagogy and stands the test of expert investigation and educational measurement.

The Platoon School and the Individual Child: by W. H. Holmes.

It states in detail the advantages of the Platoon school over the Traditional school in affording opportunities to teachers for knowing the individual child and individualising teaching.

The Experiences of the Child—how they affect Character and Behaviour: by C. Macfie Campbell.

The author attempts to bring into relief the importance of early experiences in the development of temperament and behaviour of the individual. The author shows how parents' personality influences the children, how the parents' complexes cause repression and how the conduct of parents impresses itself upon children. He points out the great emotional significance and pathological potency of parental behaviour.

М. Сновн.

#### Communications.

Copy of the letter, dated the 26th June, 1927, from Mrs. Barker, 2, Auckland Place, Calcutta, to Lt.-Colonel Berkeley Hill, President, Indian Psychological Association, Ranchi.

"The Sub-Committee appointed by the Bengal Presidency Council of Women for enquiry into the numbers of Mentally Deficient Children in Bengal, concluded its enquiry (after a period of eighteen months) in December, 1926.

"There are now on our list the names of forty European and Anglo-Indian boys and girls, mostly but not entirely from Bengal. Our investigation included Indians too, but owing to the complete indifference of authorities of Indian Schools, and the difficulty of getting to know of any Indian homes, we were obliged to confine ourselves to Europeans and Anglo-Indians. There are consequently large numbers of mentally defective children who may be presumed to be unknown; all except the few at Kurseong, who are on our list are living uncontrolled and unprotected and must be in some cases, a direct menace to the health and moral welfare of the community.

"A deputation to Government early in March met with no encouraging result, the Government being already confronted with the colossal task of providing elementary education to some millions of normal children. The Council of Women were told that all they could expect would be a grant if some person or persons could be found to liberally endow a special school for these unfortunate children that no human civilisation can longer neglect.

"We are by no means considering that our labours have ended in futile investigation; unobtrusively we are labouring to rouse the much needed interest of a community that has not risen to a sense of its obligation because of ignorance rather than indifference. "I am confident that we shall meet with your whole-hearted support and advice in whatever scheme is finally decided upon."

In response to the letter circulated by Lt.-Col. Berkeley Hill, the President of the Indian Psychological Association, inviting suggestions for the advancement of the Association, the following communications have been received:

#### From Mr. P. Srinivasulu Naidu, Findlay College, S. India.

Though advertisement is very helpful in this direction, the best means would be to adopt the system of "corresponding membership." One member may be deputed to correspond with the teachers of a University and its affiliated colleges. Leading industrialists may also be approached. Thus when sufficient spade-work has been done, a conference may be held of those willing to join and branch Associations may be formed in this way.

As regards co-operation, Mr. Naidu suggests that those who are interested in any branch of Psychology should be brought together as often as possible. Finally he expresses his willingness to serve as a 'corresponding member' and signifies his readiness to serve the Association at all times.

# From S. Sankara Menon, Esq., B.A., B.L., Vakil, High Court, Trivandrum.

- 1. Mr. Menon suggests that a brief review of the papers read in the Congress should be prepared and published in all the leading Dailies of India.
- 2. Since Psychology has filiations with the Medical Science on the one hand and Jurisprudence on the other, it is necessary to include members from both the professions for the advancement of the science. It is suggested that the President of the Association should invite the leading Jurists, Educationists and Ecclesiastics to become members of the Association.

- 3. Mr. Menon next suggests that the Secretaries should gather information about the research works which the members of the Association are carrying on or propose to undertake, A list of this nature should be published from time to time.
- 4. It is further suggested that there should be an annual dinner of the members of I.P.A. to be held on the day the President delivers his address.
- 5. Mr. Menon is opposed to the idea of starting a branch Association at Trivandrum. He is in favour of having a strong central Association at this stage.

In response to the communication of Lt.-Col. Berkeley Hill regarding Mental Defectives Act for India, the following suggestions from Mr. Menon have been received:

Mr. Menon suggests that a committee should study laws on the question of mental deficiency in the United States, Germany, Italy and England and draw up a scheme to suit the Indian conditions. His next suggestion is that at the next session of the Indian Science Congress at Calcutta, a small deputation led by Lt.-Col. Berkeley Hill should wait upon H.E. the Viceroy and the Hon'ble Law Member to the Government of India and explain the necessity of the Act.